

What is claimed is:

1 1. A method of affixing a component to a film for use in producing an inflatable

2 object having an enclosed interior, said method comprising the steps of:

3 providing a component having a surface having at least a portion thereof coated with a

4 heat activatable material to be affixed into the interior of the inflatable object,

5 providing a film having one surface thereof comprised of a plastic material that is adapted

6 to be processed to form an inflatable object,

7 placing the component upon the one surface of the film with the surface having at least a

8 portion thereof coated with the heat activatable material contacting the one surface of the film,

9 and

10 heat and pressure sealing the heat activatable material coated surface of the component to

11 the one surface of the film.

1 2. The method of affixing a component as defined in claim 1 wherein the step of

2 providing a film comprises providing a film having one surface comprised of polyethylene.

1 3. The method of affixing a component as defined in claim 1 wherein the step of

2 providing a component comprises providing a component having a heat activatable surface of a

3 heat activatable adhesive.

1 4. The method of affixing a component as defined in claim 2 wherein the step of

2 providing a component comprises providing a component having a heat activatable surface of

3 polyethylene.

1 5. The method of affixing a component as defined in claim 1 wherein the step of
2 heat and pressure sealing the heat activatable material surface of the component to the plastic
3 surface of the film comprises providing a heater that is movable between a position displaced
4 away from the surfaces to a position in close proximity to the surfaces to cause heat emitted from
5 the heater to reach the surfaces.

1 6. The method of affixing a component as defined in claim 5 wherein the step of
2 providing a heater comprises providing a heater having a hot head coated with a non stick
3 surface.

1 7. The method of affixing a component as defined in claim 5 wherein the step of
2 heat and pressure sealing the heat activatable material coated surface of the component to the
3 polyethylene surface of the nylon film comprises positioning a protective material intermediate
4 the heater and the polyethylene surfaces.

1 8. The method of affixing a component as defined in claim 1 wherein the step of
2 providing a component comprises providing a sound module.

1 9. The method of affixing a component as defined in claim 1 wherein the step of
2 providing a film comprises providing a nylon film having an exterior metalized skin.

1 10. The method of firmly affixing a component as defined in claim 1 wherein the step
2 of placing the component onto the film comprises providing a robotic arm and manipulating the

3 robotic arm to pick up the component from a remote location and move the component to a
4 predetermined position upon the one surface of the film.

1 11. A method of manufacturing an inflatable object having a component affixed to the
2 interior thereof, the method comprising the steps of:

3 providing a component having a surface having at least a portion thereof coated with a
4 heat activatable material to be affixed into the interior of an inflatable object,

5 providing a first film comprised having one surface thereof comprised of a plastic
6 material that is adapted to be processed to form an inflatable object,

7 heat and pressure sealing the heat activatable material coated surface of the 20
8 component to the plastic surface of the first film,

9 providing a second film having one surface thereof comprised of a plastic material, and
10 peripherally heat sealing the first film to the second film to form a sealed envelope there
11 between with the component located within that sealed envelope.

1 12. The method of manufacturing an inflatable object as defined in claim 11 wherein
2 the steps of providing a first and second film comprise providing nylon films having interior
3 polyethylene surfaces.

1 13. A method of manufacturing an inflatable object as defined in claim 11 further
2 including the step of continuously moving the film and intermittently stopping the film to carry
3 out the step of heat and pressure sealing the heat activatable coated surface of the component to
4 the plastic surface of the first film.

1 14. A method of manufacturing an inflatable object as defined in claim 11 wherein
2 the step of providing a component comprises providing a sound module.

1 15. A method of manufacturing an inflatable object as defined in claim 14 wherein
2 the sound module is comprised of a foam material having the heat activatable material coating.

1 16. A system for affixing a component within an inflatable object, said system
2 comprising:

3 a system for moving a film having a plastic surface;
4 means to stop the movement of the film at predetermined intervals,
5 a placement mechanism adapted to position a component having a heat activatable
6 material coating onto the film at a selected location upon the film with the heat activatable
7 material coated surface of the component facing the plastic surface of the film,

8 a heater adapted to be normally located displaced from the film, the heater adapted to be
9 moved to a location in close proximity to the film so as to heat the film to affix the component to
10 the film.

1 17. The system as defined in claim 16 wherein the heater is moved by a piston from a
2 lower position to be raised to an upper position beneath the film in close proximity thereto.

1 18. The system as defined in claim 16 wherein a protective material is located
2 intermediate the heater and the film during the heating process.

1 19. The system of claim 18 wherein the protective material is polytetrafluoroethylene.

1 20. 0The system of claim 16 wherein the placement mechanism is a robotic arm.

1 21. An inflatable object comprised of a film having a plastic interior surface adapted
2 to contain an inflating gas and a component having a surface coated with a heat activatable
3 material heat sealed to the plastic interior surface of the inflatable object.

1 22. The inflatable object as defined in claim 21 wherein the plastic interior surface of
2 the inflatable object is polyethylene.

1 23. The inflatable object as defined in claim 22 wherein the heat activatable material
2 coating on the component is polyethylene.

1 24. The inflatable object as defined in claim 21 wherein the heat activatable material
2 coating on the component is a heat activatable adhesive.

1 25. The inflatable object as defined in claim 21 wherein the component is a device
2 capable of producing a sound or light.